

Improving Procure-to-Pay Processes

From Suppliers to Cash in the Bank: What Works?

Executive Summary

In any organization, procurement and accounts payable activities are inextricably linked. Becoming efficient in both processes and improving the communication between the processes should result in lower costs, fewer personnel, and improved cycle times. Organizations with high-performing procure-to-pay processes examine how these activities interact in order to boost productivity and efficiency, as illustrated in Figure 1. In doing so, they ultimately reduce process cost and improve their cash flow.

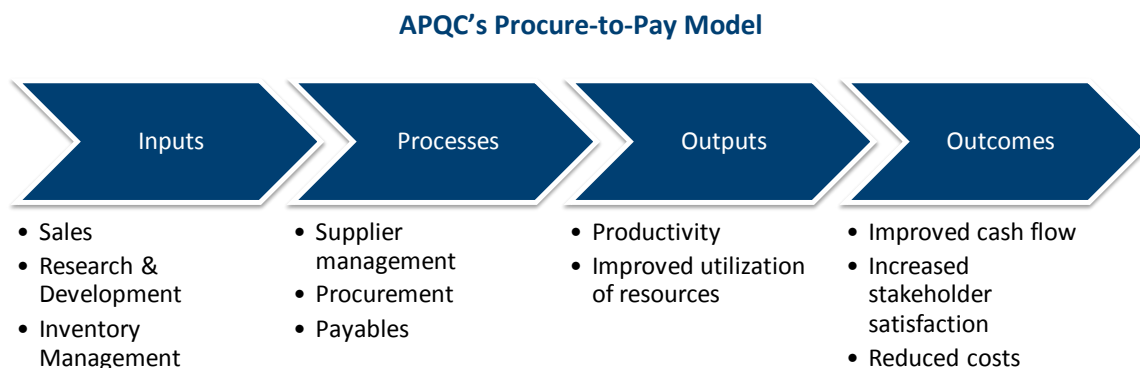


Figure 1

What are the business drivers of integrated procure-to-pay processes that lead to specific improvements and business results? APQC has identified five key characteristics within organizations with high-performing procure-to-pay processes.

1. **MEASURE:** Top performers understand the relationship between procurement and payables and have integrated goals and objectives for procure-to-pay processes. These goals are explicitly linked to performance indicators for evaluating and improving the integrated processes.
2. **CENTRALIZE:** They centralize the procurement process and implement cross-functional teams to enable focus on more strategic, value-added processes.
3. **MANAGE SUPPLIERS:** They appraise suppliers and work with them to assess performance and identify improvement opportunities across organizational boundaries.
4. **AUTOMATE:** They automate purchase order processing to improve cycle times and cost savings.
5. **SECURE STAKEHOLDER COMMITMENT:** They evaluate and promote increased participation and decreased rogue behavior from all stakeholders in the official procure-to-pay process.

For each of the five business drivers listed above, we examine the impact of people, process, and technology on outcomes. In addition to insights and perspective from APQC's Open Standards Research (www.apqc.org/osbc), we will include examples from prior APQC Collaborative Research, practices from industry leaders, and points of view from experienced professional services firms. For additional detail, please see the full list of [procurement questions](#), [metric calculations](#), and the [glossary of key terms](#).

Section 1: Goals, Objectives, and Measures

If a company lacks clear goals and objectives, has not benchmarked, and does not know the costs of its procurement and procure-to-pay process, in my mind they are hopeless.

—Kate Vitasek, Managing Partner, Supply Chain Visions

Creating goals and objectives is an important first step to improving any process in an organization. If organizations do not benchmark their processes, then they cannot know how well (or poorly) they perform over time—or how they compare to their competitors.

PEOPLE

In any organization, labor costs ranks near the top on the overall list of expenses, keeping productivity of the labor vital. The challenge most organizations face is how to measure productivity, in this case for the staff supporting procurement and payables processes. APQC measures the number of purchase order line items processed per full-time equivalent (FTE) engaged in ordering materials and services. Figure 2 shows a dramatic difference between top and bottom performers in APQC's Open Standards Research for this measure—specifically, a 432.7 percent productivity increase for top performers.

Number of purchase order line items processed per “order materials/services” FTE

Bottom Performers (25th Percentile)	Median	Top Performers (75th Percentile)
2,501	4,676	13,324

N=168

Figure 2

Those same top performers also report fewer FTEs for the procurement cycle per \$1 billion purchases, as shown in Figure 3 on page 3. In addition, those top performers have lower total costs for the procurement cycle per \$1,000 purchases (Figure 4, page 3). For \$1 billion in purchases, there would be a cost difference of more than \$3 million. Thus, the FTEs at top-performing organizations are more productive without being more expensive.

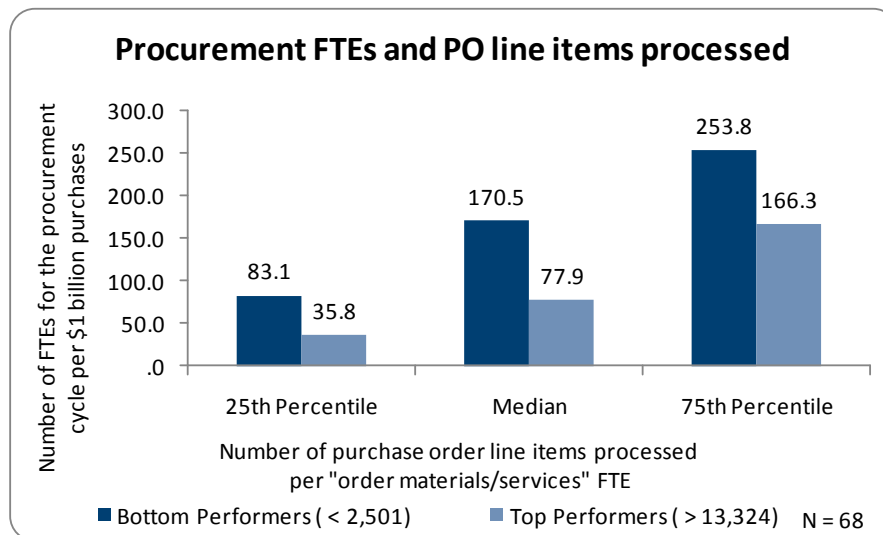


Figure 3

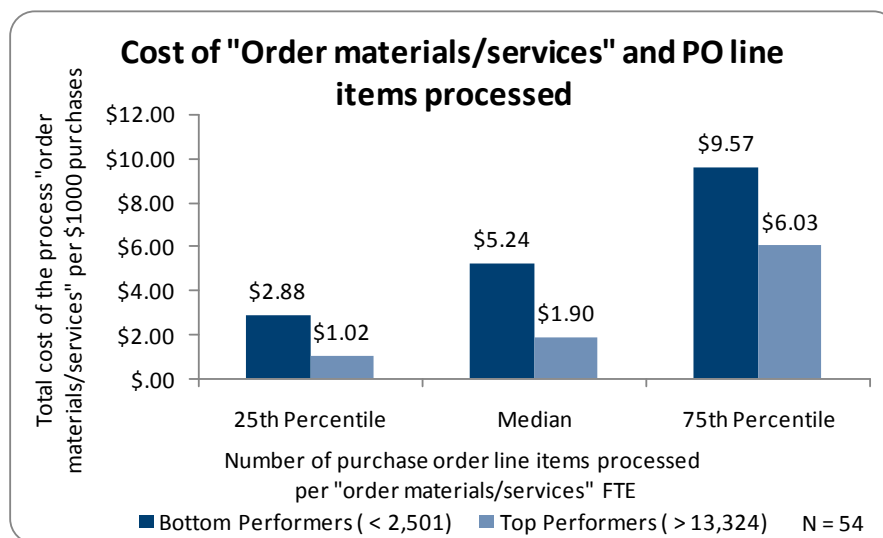


Figure 4

PROCESS

Well-performing processes do not "just happen." They require focusing on the strategic activities found within the process. Spending more time developing sourcing strategies and appraising and developing suppliers is one of these activities. One notable example is Cessna. The organization has a cross-functional strategic planning process that is commodity-team driven, targets various metrics three to five years out, and establishes plans to meet those goals. The organization also uses a goal deployment process that includes meetings every two weeks to review procurement department performance with the vice president of supply chain management. In addition, Cessna conducts industry-specific and

cross-industry benchmarking. Cessna's procurement organization is strategically linked with accounts payable, even though they are two different groups.

A common mistake is to neglect the strategic importance of goal setting and measuring progress and instead focus primarily on the tactical task of ordering materials and services. Caturano and Company, a professional services organization, has observed through its operations that many organizations do not have documented goals and objectives for procurement. The challenges for their clients involve tracking metrics, setting goals, and improving those metrics.

TECHNOLOGY

APQC's procurement database shows 45.7 percent of procurement FTEs are allocated to ordering materials or services (Figure 5). This is problematic in that organizations have only 54.3 percent of their procurement FTEs dedicated to the other three, more strategic processes. One way to improve this FTE distribution is to implement e-procurement and e-sourcing. APQC finds that organizations with such automated practices have markedly fewer FTEs allocated to ordering materials/services and, conversely, more FTEs allocated to the other, more strategic processes (Figure 6 on page 5).

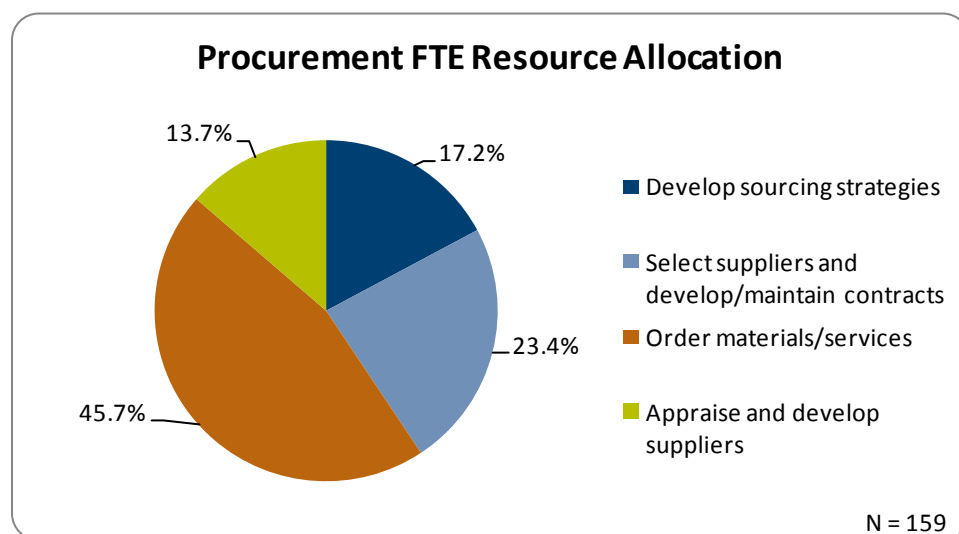


Figure 5

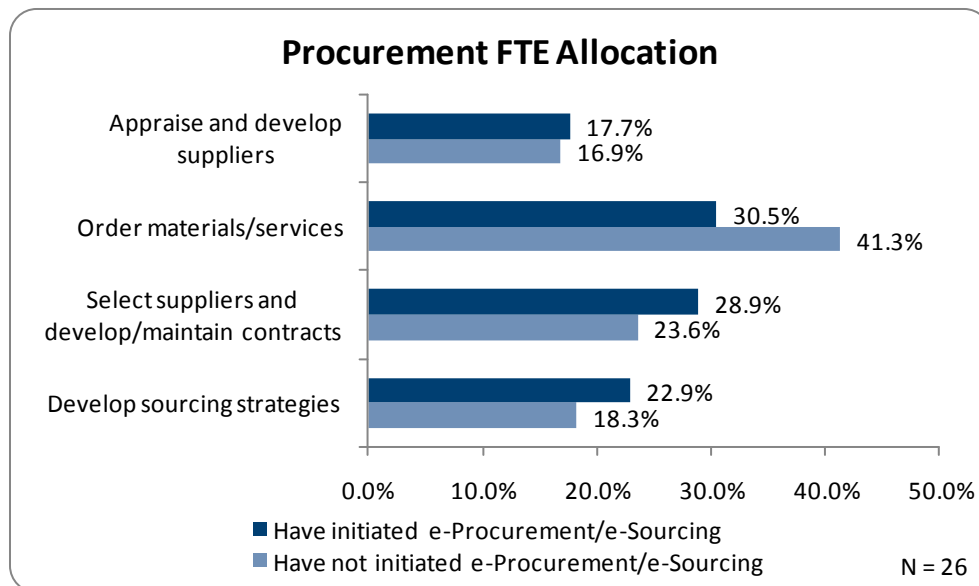


Figure 6

When organizations focus on tactical instead of strategic activities, their metrics show higher costs, longer cycle times, and more FTEs required.

Spending **LESS** time on *developing sourcing strategies* means the organization has:

- Longer cycle times to place purchase orders
- More active suppliers in the vendor masterfile per procurement FTE
- Lower percentages of purchases made via blanket/contract orders

Spending LESS time on selecting suppliers and developing/maintaining contracts is tied to:

- Higher total costs of the procurement cycle per \$1,000 revenue
- More FTEs for the procurement cycle
- Lower percentages of purchases made via blanket/contract orders

Spending **MORE** time on *ordering materials/services* results in:

- Longer cycle times to place purchase orders
- Higher total costs of the procurement cycle per \$1,000 revenue
- More FTEs for the procurement cycle
- Lower percentages of purchases made via blanket/contract orders

If less is more, how much more? Figure 7 on page 6 details key procurement metrics and the impact of spending more or less time on tactical buying than strategic planning. Less time ordering materials (and therefore more time on strategic activities) results in faster cycle times, lower costs, fewer FTEs, and more blanket/contract orders – which can significantly impact cash flow when combined.

Key Procurement Metrics Compared to Time Spent on Tactical Activities				
	Spend less time ordering materials		Spend more time ordering materials	
	Median	N	Median	N
Cycle time in hours to place purchase order	16.0	57	24.0	66
Total cost of the procurement cycle per \$1,000 revenue	\$3.93	42	\$5.49	52
Number of FTEs for the procurement cycle per \$1 billion revenue	32.5	71	45.7	73
Number of FTEs for the procurement cycle per \$1 billion purchases	96.2	72	115.1	74
Percentage of the total value of annual purchases allocated among the following purchase type: blanket/contract orders	32.9%	45	11.7%	63

Figure 7

Section 2: Centralization and Standardization

If you are making procurement changes, then you need accounts payable at the table. And vice versa.
—Brian Hill, Senior Consultant, Caturano and Company

An organization can perform procure-to-pay processes well regardless of how it is structured; however, centralization can help an organization excel by enabling an easier, faster, and less expensive process. If an organization cannot centralize procurement and payables, then the second best option is to standardize policies and practices to the greatest extent possible.

In addition to simplifying work for procurement and payables support staff, centralization helps align individuals based on item type or commodity purchases. In that model, Caturano and Company has found, one person becomes an expert in a given area and has greater control, can build deeper supplier relationships, and can seek better discounts. Centralization and standardization also facilitate the ability to take advantage of early payment discounts. This enables an organization to transform accounts payable into a revenue center by leveraging systems, people, and efficiency gained to take advantage of those discounts and become a more value-added function.

PEOPLE

Organizations with centralized procurement functions are spending less time on ordering materials/services and more time on other more strategic processes (Figure 8, page 7). With a centralized procurement function, procurement staff members are better able to focus on developing sourcing strategies and selecting suppliers than in a decentralized function. By having enterprise-wide

visibility into spending and vendors, better deals can be negotiated. Centralized functions can conduct deeper spend analysis and examine which vendors receive the most money. Also, APQC has found that the greater the extent to which procurement is centralized, the easier it is for management to coordinate strategic focus and communicate. Another benefit from centralization is that teams are better able to function because of consistent measures and goals.

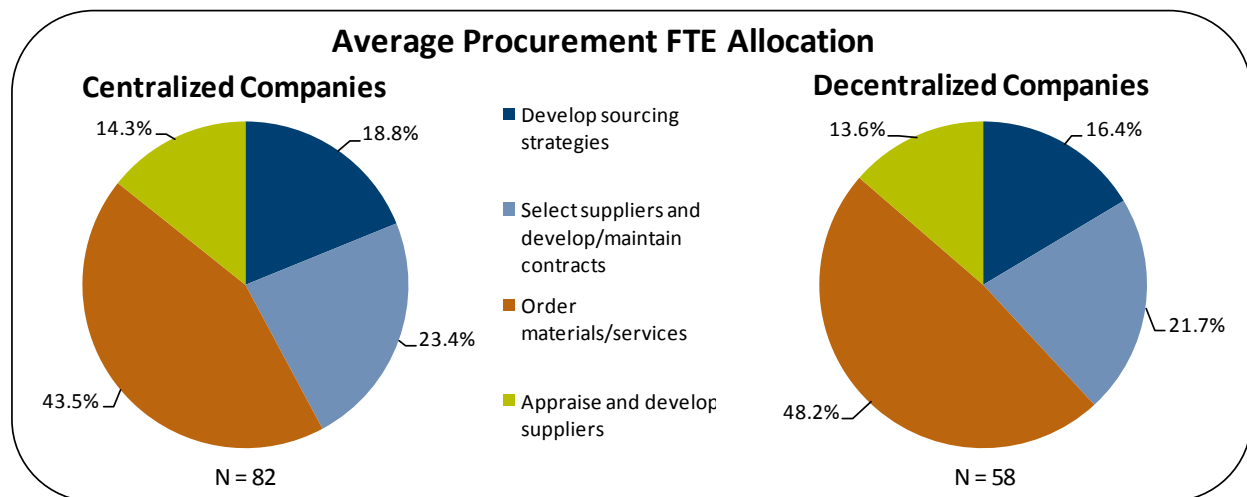


Figure 8

Shifting to a centralized model is not without challenges and definitely requires a proven change management methodology. Depending on an organization's culture, individuals who previously had control over which suppliers they worked with may push back as control is diminished at the field or site levels. As with any change there is resistance, but in the case of centralization within procurement processes and activities there is significant benefits in the long term. Key to a successful transition are a clear vision, a defined change strategy, and engaged leadership.

PROCESS

Cessna, again, provides a successful example of how to centralize and standardize procurement and accounts payables. The organization gradually migrated to a more centralized management structure for direct procurement and put policies in place to reinforce that structure. When moving to a more centralized structure, Cessna encountered some resistance related to feelings of loss of control and territorialism. But with support from upper management, a clear vision, and articulation of the value to the employees, the evolution has been successful.

With the move to centralized procurement at Cessna, employee time has shifted to more strategic activities such as supplier relationship management and increasing the percentage of parts on long-term agreement—something Cessna improved from less than 5 percent to almost 90 percent within a few years' time.

APQC's OSBC survey indicates similar positive results among its respondents. Organizations with centralized procurement functions report the following benefits:

- lower total costs for the “develop sourcing strategies” process per \$1,000 revenue;
- lower total costs for the “appraise and develop suppliers” process per \$1,000 revenue;
- lower total costs for the “order materials/services” process per \$1,000 revenue;
- fewer active vendors in the master file per \$1 million purchases;
- lower total costs for the procurement cycle per \$1,000 revenue (Figure 9);
- fewer FTEs for the procurement cycle per \$1 billion revenue (Figure 10, page 9);
- fewer FTEs for the procurement cycle per \$1 billion purchases; and
- higher percentages of purchases made via blanket/contract orders.

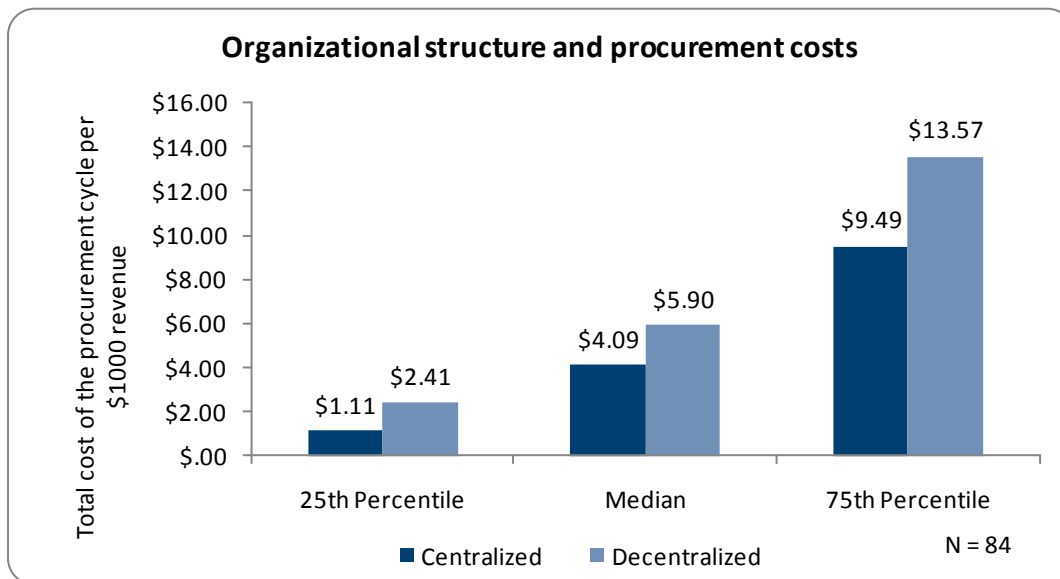


Figure 9

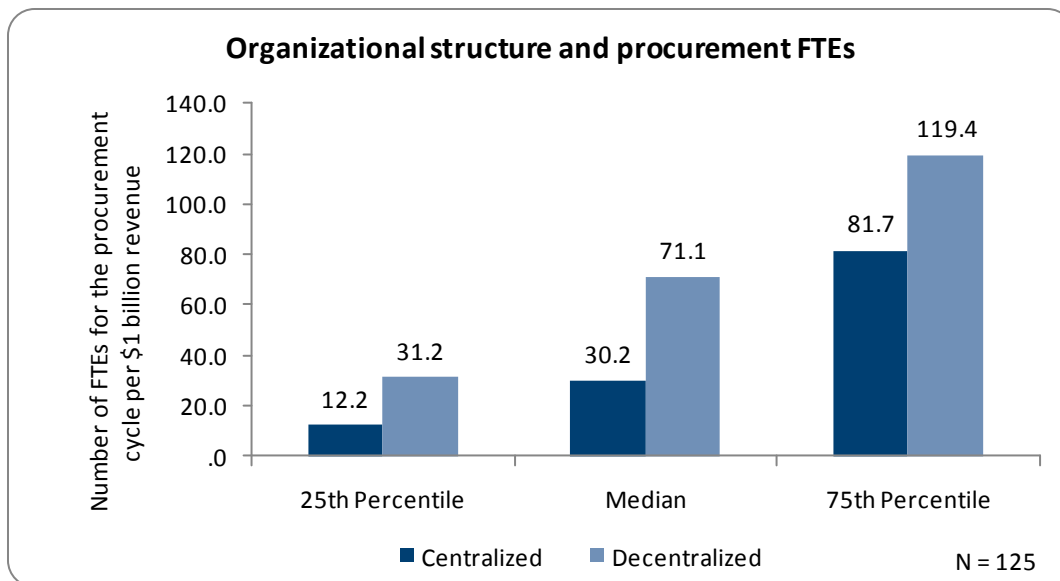


Figure 10

TECHNOLOGY

Almost 90 percent of our parts now come from long-term agreements; so we no longer have to worry about which supplier to source from or how much we are going to pay. It's just a matter of doing a release every time a requirement comes through.

— Rod Anderson, Director of Strategic Sourcing, Cessna

As organizations automate their procurement and payables processes, they can invest the time freed up by automation in developing sourcing strategies and maintaining contracts that are highly valued (again, linked to spend analysis to determine the appropriate supplier relationships to focus on).

Centralization provides an opportunity to streamline procure-to-pay processes by increasing the number of blanket, or contract, orders. Organizations with more blanket/contract orders report fewer FTEs for the “order materials/services” process and a lower average supplier lead time on purchased materials. Conversely, organizations that report more individual purchase orders report longer average supplier lead times on purchased materials.

Organizations that are top performers with regard to placing blanket/contract orders (those that place 51 percent or more of their orders via contract/blanket orders) compare favorably to bottom performers (those that place less than 5 percent of orders via blanket order/contracts) in terms of:

- lower costs for the “order materials/services” process per \$1,000 purchases;
- fewer FTEs for the process “order materials/services” per \$1 billion revenue (Figure 11, page 10);
- lower total costs for the procurement cycle per \$1,000 purchases;
- shorter average supplier lead times on purchased materials (Figure 12, page 10);
- higher percentages of supplier orders received on time; and
- higher percentages of purchase orders received completed.

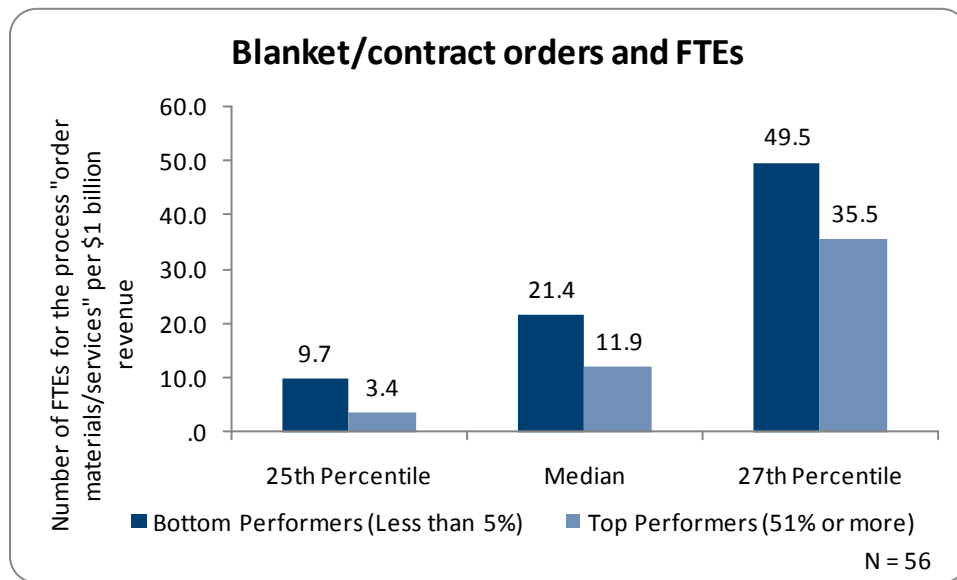


Figure 11

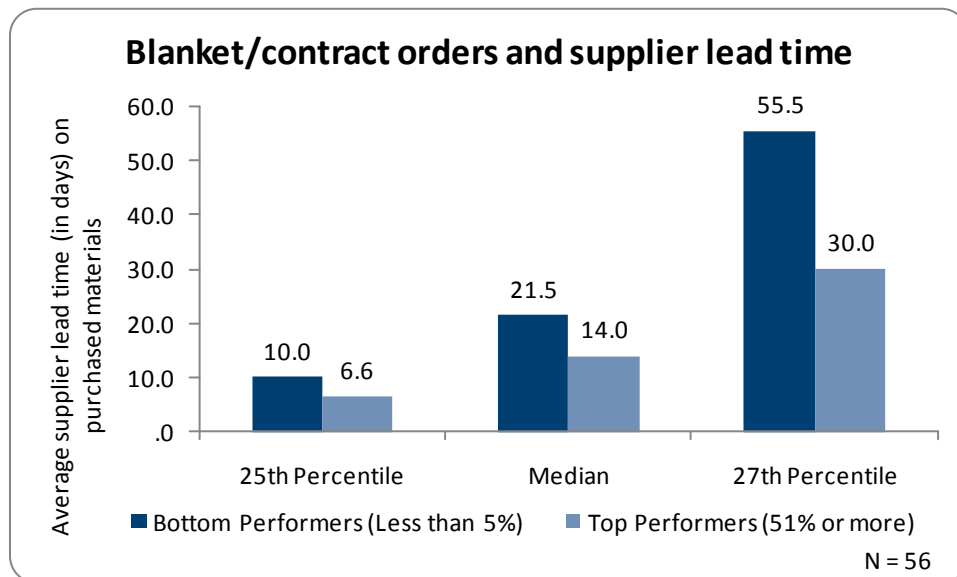
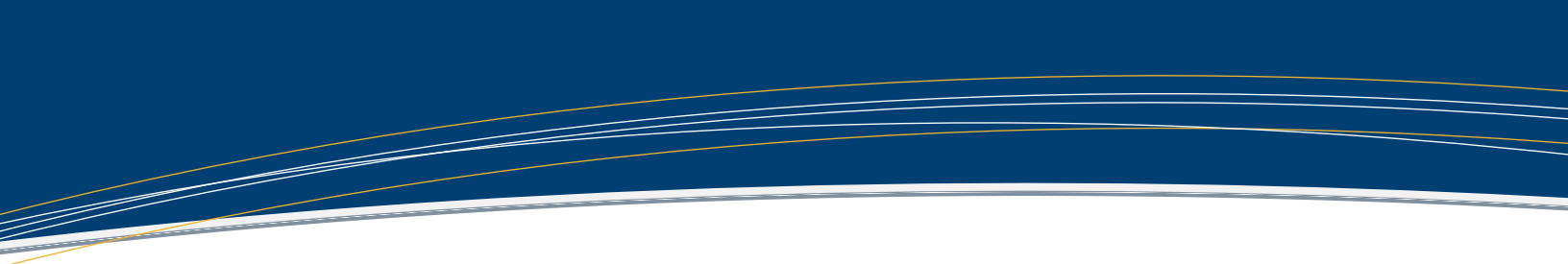


Figure 12

Section 3: Appraise and Develop Suppliers

There is no number [of suppliers] that we have ever tried to drive to. All you need is one good supplier: one growth supplier for every commodity you buy.

—Rod Anderson, Director of Strategic Sourcing, Cessna



Many times, organizations focus too many resources on the process of ordering materials and services and neglect front-end processes. By appraising and developing suppliers effectively, an organization can save money in the long run. This weeds out unnecessary, inefficient, or ineffective suppliers and fosters stronger relationships with good suppliers. It is those strategic supplier relationships that become the basis of a highly efficient and well-executed supplier management program.

PEOPLE

Procure-to-pay processes also involve suppliers. Supplier management is a critical interdependent aspect of procurement; an organization cannot fix the processes inside its boundaries without getting everyone in the chain on the same page. (For additional information regarding supplier relationship management, please see APQC's 2007 report *Supplier Relationship Management: Collaboration for Win-Win Competitive Advantage*). Supplier management can benefit from thorough spend analysis, use of blanket/contract orders, and effective use of technology.

Organizations that neglect to invest time in appraising and developing suppliers experience lower percentage of purchase orders approved electronically, higher total costs for procurement cycles, and have more active suppliers in the vendor master file requiring more procurement oversight.

Also, organizations need to ensure they have an appropriate number of suppliers. Otherwise, an organization can find itself in a situation with a great process used by 1,000 suppliers—when only 200 suppliers are needed.

PROCESS

Rather than setting a benchmark for the appropriate number of suppliers, Caturano encourages its clients to be strategic in their sourcing strategy. Caturano believes organizations should centralize procurement, adopt a strategic focus, review the types of items or services purchased, align individuals with the key purchases, and then make the decision to consolidate spend with a few suppliers if necessary.

If an organization selects effective suppliers and works with them to create and execute effective contracts upfront, then it will help streamline the back-end procure-to-pay process. Figures 13 and 14 on page 12 show the impact of investing in spending analysis on procurement costs and blanket/contract orders. Organizations invested in spending analysis report:

- lower total costs for the procurement cycle per purchase order;
- lower total costs for the procurement cycle per \$1,000 revenue;
- more purchase orders processed per procurement FTE;
- fewer FTEs for the procurement cycle per \$1 billion purchases;
- higher percentages of purchases made via blanket/contract orders; and
- higher percentages of purchase orders received complete.

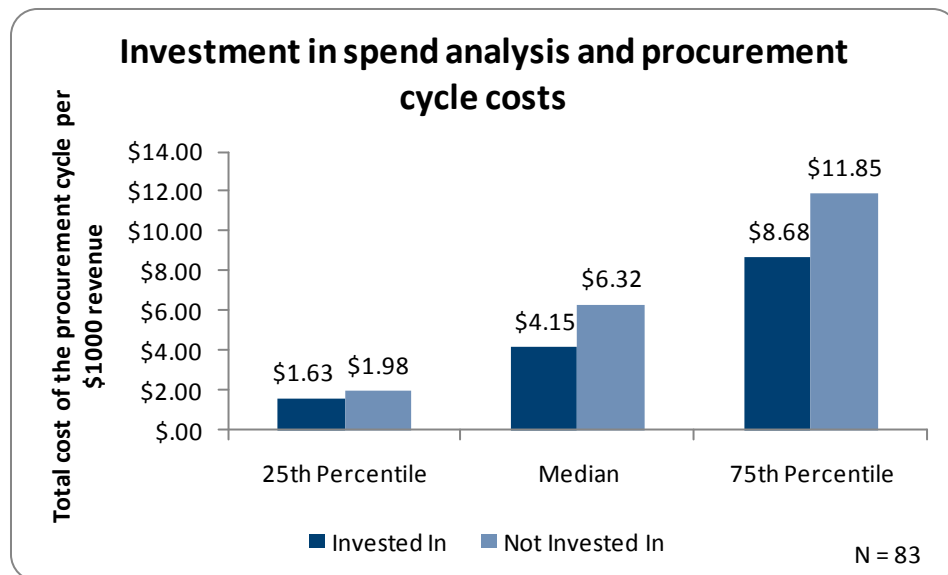


Figure 13

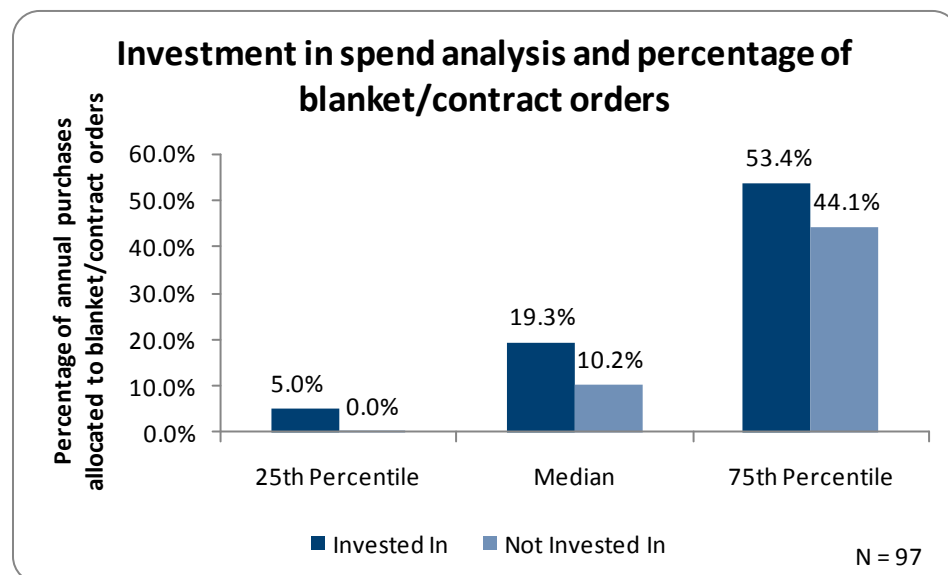
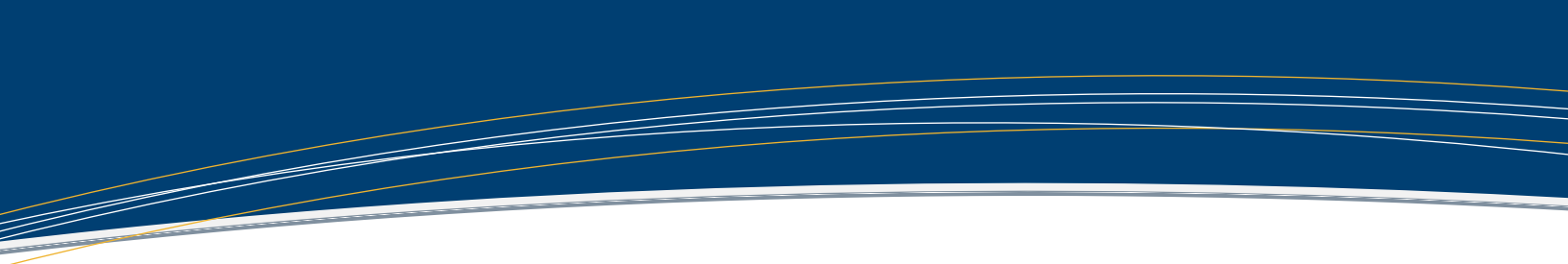


Figure 14

Additionally, organizations that engage in spending analysis report higher percentages of purchase orders approved electronically and lower percentages of maverick buying (i.e., people purchasing materials and services outside the formal system).

Cessna tracks its total value of acquisition, which is designed to look beyond price and assess the value that a given supplier has brought to the acquisition process. This metric brings in leading indicators, such



as how the supplier handles forward-stocking of inventory, lead times, and export compliance activities. As a result, for Cessna, price is not the only factor used to evaluate suppliers.

TECHNOLOGY

To improve or maintain productivity and quality, it is important that an organization have a good supplier relationship management tool, system, and/or process with appropriate control mechanisms and a focus on continuous improvement for itself and its suppliers. Organizations that report higher percentages of transactions with e-procurement-enabled suppliers report larger numbers of order line items processed per "order materials/services" FTE and higher percentages of purchase orders received damage-free.

Section 4: Automation

If you are still working in a paper system, by default you will never be best practice.
—Kate Vitasek, Managing Partner, Supply Chain Visions

Organizations can no longer afford not to automate their transactional processes. Those who fail to automate simply cannot match the speed, efficiency, and effectiveness of those who do.

PEOPLE

Regardless of how strong and efficient an organization's procurement staff is, it cannot optimize its productivity without automated purchase order processing. Automation drives productivity up and, therefore, costs down. As mentioned previously, automation also frees up employee time to be spent on value-added activities.

PROCESS

Caturano recommends several steps for automating the procure-to-pay process.

- Derive the overall strategy for managing procurement and accounts payable within the organization.
- Assess what technology is already available in-house and whether it will fit the current strategy. It is easier to leverage existing in-house technology by adding a module or taking advantage of a previously unused aspect of the current system than to implement a new system.
- Look outside the organization to leverage specialized procure-to-pay solutions that take advantage of others' lessons learned. Solutions to consider include document management tools, e-invoicing, and automated requisition systems with tracking for work flow and approvals tied back to internal controls.

The payoffs for taking such steps are clear. The cycle time to place purchase orders is faster with automation because a system can route information to the right people and ensure nothing gets lost. Among top performers, APQC has found that those invested in e-procurement place purchase order

three times faster than those not invested – two hours versus six hours (Figure 15). Also, the number of purchase orders processed per FTE rises significantly with automation (Figure 16).

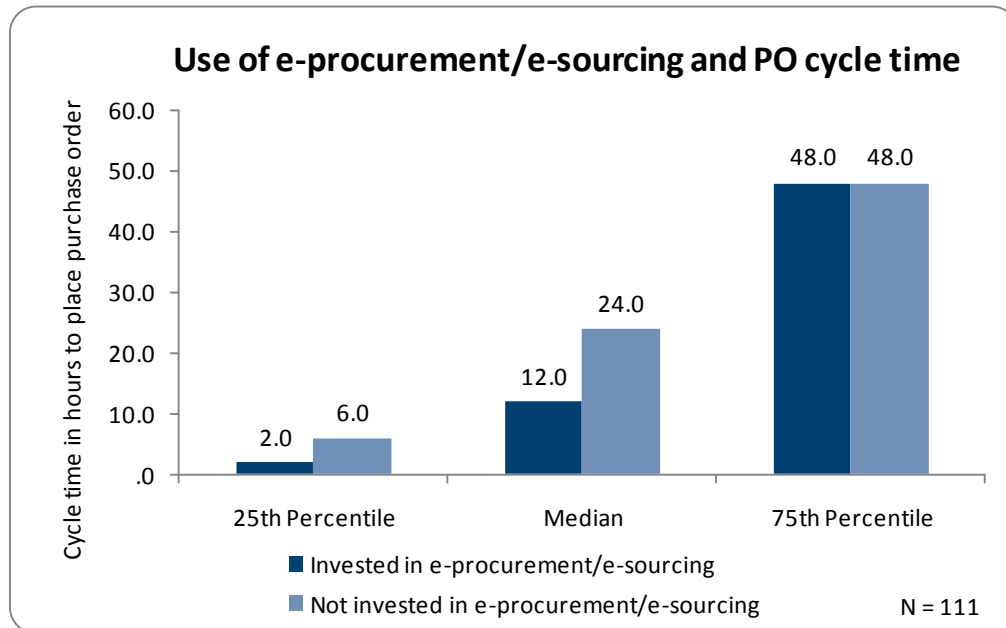


Figure 15

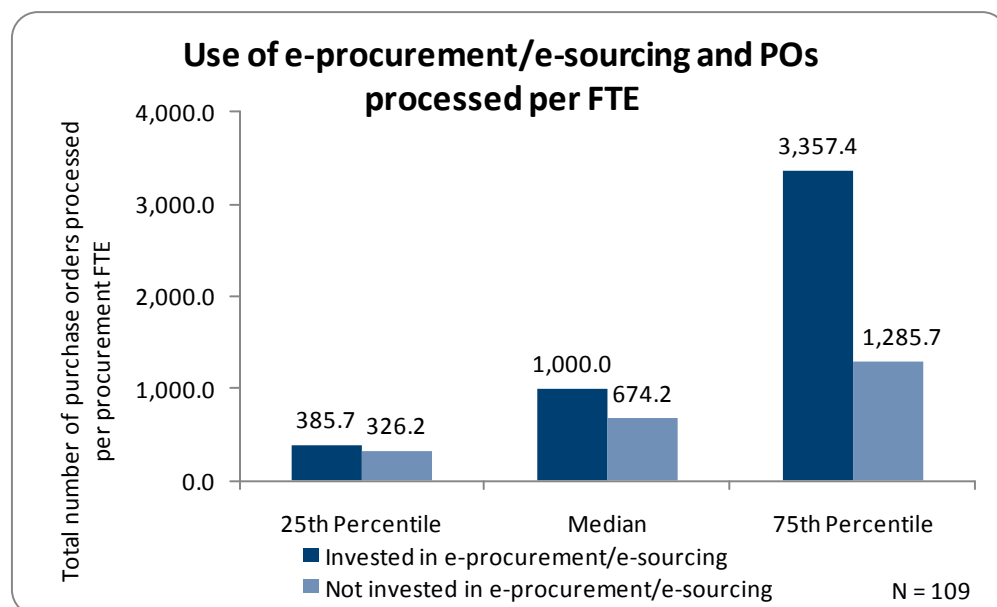


Figure 16

In addition to shorter purchase order cycle times and more purchase orders processed per FTE, as shown in Figure 17 (page 15) organizations with automated procure-to-pay processes have shorter

supplier lead times. The increased visibility automated organizations achieve with their suppliers is a key contributor to this difference.

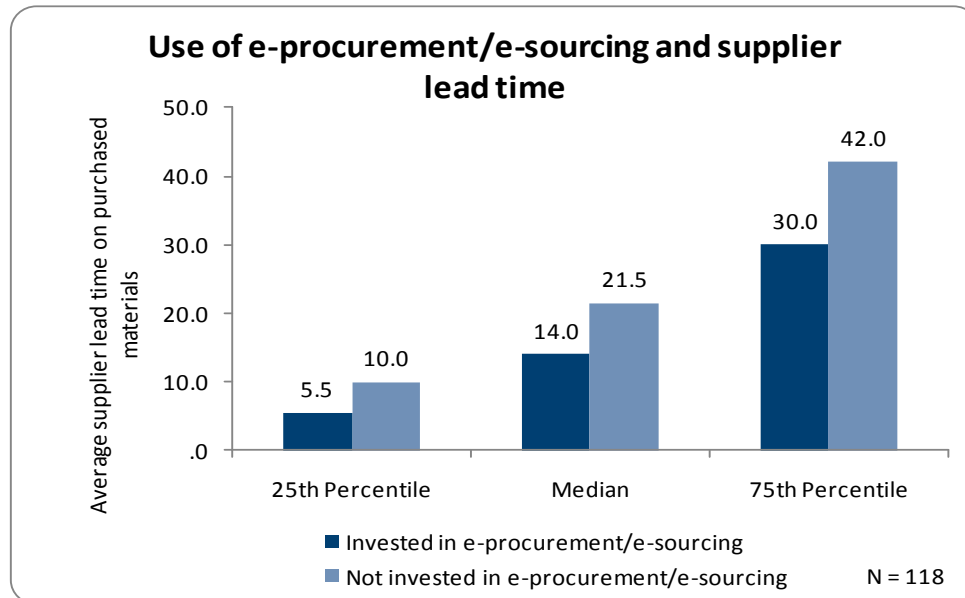


Figure 17

For example, automating the tactical buying process for indirect purchasing has allowed Cessna to almost eliminate any manual intervention by accounts payable personnel. The majority of Cessna's indirect purchasing is fully automated, allowing all orders to come through its commercial system, which has more than a half-million part numbers already negotiated on contracts. A requester can use the system to procure items without any supply chain personnel involvement. With built-in approval chains of command based on established parameters, an order goes straight to the supplier for fulfillment. After the requester receives the order and confirms it matches the purchase order, accounts payable can automatically pay out. With respect to procurement personnel, automation shifted Cessna to a more strategic point of view so tactical buyers can focus on high-dollar, unique items and strategic activities instead of tactical activities.

TECHNOLOGY

Organizations with automated procure-to-pay processes have shorter cycle times to place purchase orders, shorter supplier lead times on purchased materials, and more purchase orders processed per procurement FTE. And organizations that report higher percentages of transactions with automated suppliers report larger numbers of order line items processed per procurement FTE. There are not only positive results correlated with increased automation but also negative outcomes from continuing to submit purchase orders via paper copies in the mail; organizations that report higher percentages of purchases submitted by mail report longer cycle times to place purchase orders and higher percentages of received items failing inspection.

Another practice affecting the number of purchase orders processed per FTE is electronic data exchange. That is, once an organization produces a short statement of work, all transactions are automated including receiving an approval note, opening a purchase order, and submitting payment. Top performers that employ the practice by, for example, transmitting messages instead of bills and checks in at least 15 percent of all procure-to-pay transactions often report a higher number of purchase orders processed per FTE than bottom performers (that use it less than one percent of the time) (Figure 18).

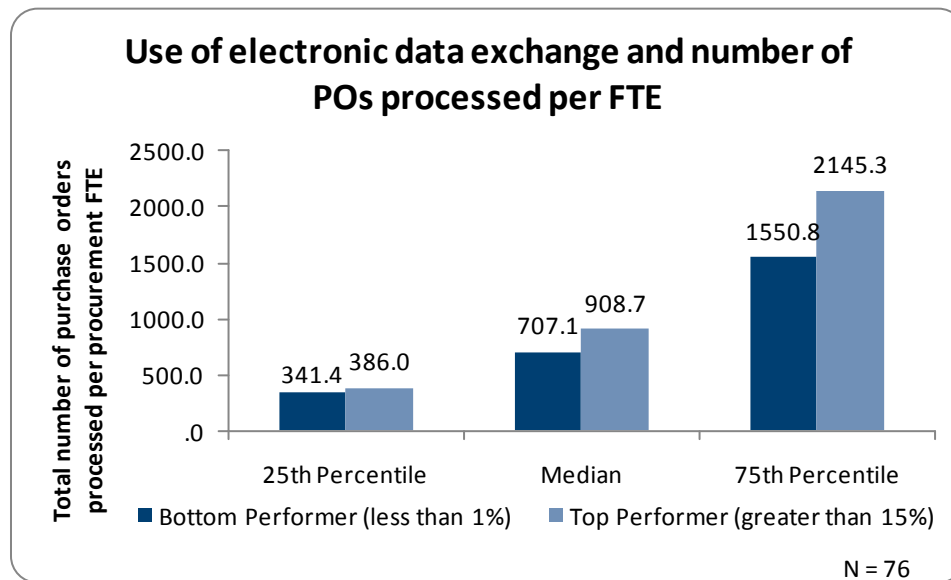


Figure 18

Organizations that report higher percentages of purchase orders approved electronically report fewer FTEs for developing sourcing strategies, ordering materials or services, and selecting suppliers and developing/maintaining contracts per \$1 billion in purchases. They also report lower percentages of maverick buying and lower costs for ordering materials or services per purchase order line item. And organizations with a higher percentage of purchases via electronic data exchange report higher percentages of purchase orders received damage-free and higher numbers of purchase order processed and line items processed per "order materials/services" FTE.

Section 5: The Importance of Promoting Buy-In

Having a great procure-to-pay process is only part of the solution. Even if there is a theoretically perfect system in place, it will never reach its full potential if employees and/or suppliers do not buy in.

Without buy-in for the procure-to-pay process, organizations often face the challenges associated with maverick buying (i.e., purchasing that occurs outside the formal process or channels). APQC's survey results show that organizations with higher percentages of maverick buying report higher percentages

of purchases via telephone, lower percentages of purchases from certified vendors, and longer average supplier lead times.

As illustrated in Figure 19, top performers with regard to maverick buying (less than one percent of transactions) report lower costs for the procurement cycle than bottom performers (reporting at least 16 percent). These same top performers report a higher percentage of supplier orders received on time than bottom performers (Figure 20).

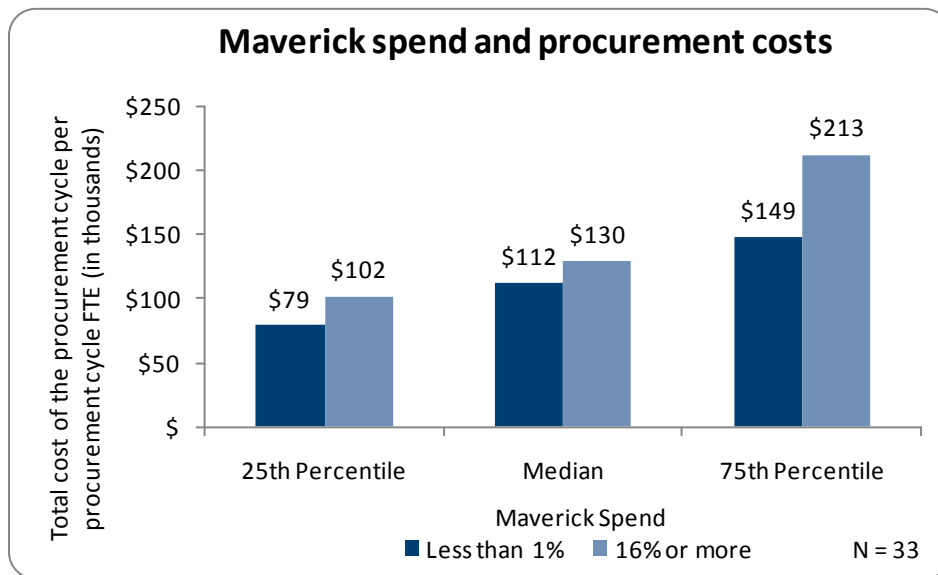


Figure 19

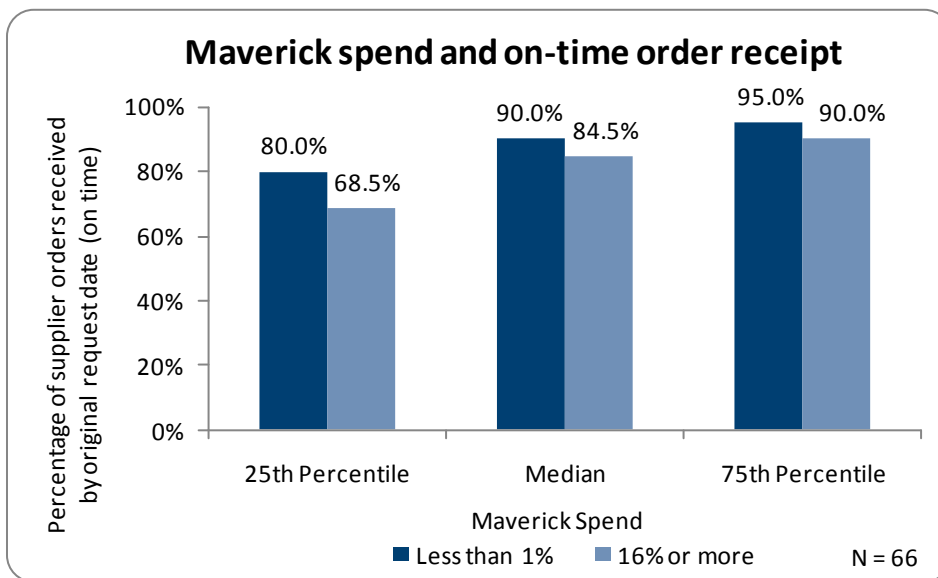


Figure 20

PEOPLE

Because cash flow is critical (and even more so in a turbulent economy), it is in an organization's best interest to prevent maverick spending by communicating senior management support, automating procurement, disallowing procurement to accept paper forms, evaluating supplier relationships, taking advantage of discounts when possible, and ultimately better managing cash flow.

To manage maverick spending, an organization should strive for all suppliers and employees to adhere to the process. The savings and benefits to the organization is a function of the number of suppliers and number of transactions that flow through an automated system. Compliance with an organization's procure-to-pay process can be measured by the percentages of suppliers and transactions that are compliant. Since transactions mean work for the organization, it is important to focus on getting both suppliers and transactions compliant.

Some organizations decide to put only their top 10 suppliers in a formal supplier relationship management program with formalized meetings and scorecards. However, if the top suppliers in terms of dollars spent are not the ones with the most transactions, then the organization is still spending too much time on a nonvalue-added element of ordering materials and services with less important suppliers.

PROCESS

It is important that decision makers in the field support the official system. Decentralized procurement increases the chance of maverick behavior. APQC is seeing the resurrection of centralized functions in order to eliminate maverick spending.

Cessna has regular communication, meetings, and policies in place related to teaming and enterprise involvement that are critical to its procure-to-pay success. Through its goal deployment process and extensive use of key performance indicators, its procure-to-pay process is visible, it is clear what others are doing, and employees understand their roles in supporting it. Cessna then measures and monitors the percentage of information flowing through its formal procure-to-pay process. In cases of noncompliance, the organization tries to understand why an employee is going around the system to get his or her job done and seeks to change the system if necessary to better help the employee work. The ultimate goal is to have everything go through Cessna's formal process.

TECHNOLOGY

By using technology and structure to centralize procurement and by having clear goals and objectives, organizations can successfully drive the change needed to improve their procure-to-pay processes. If an organization can automate procurement and use technology to instill thresholds and establish preferred vendors, then it does not have to be as concerned about maverick buying because the system essentially removes that as an option.

Conclusion

Many companies have failed by just addressing procurement or just addressing accounts payable. It is important to tackle it at a higher level holistically from procurement to payment.

—Mark DiGiovanni, Director, Caturano and Company

APQC has seen that in all organizations procurement and accounts payable activities are highly interrelated. Organizations with high-performing procure-to-pay processes examine how these activities interact to boost productivity and efficiency. In addition to understanding the goals and objectives for the procurement function and the procure-to-pay process, top performers use these goals to drive the performance indicators they use to report performance, which in turn help drive improvement across the process. Centralizing the procurement process enables greater focus on procurement strategy, including appraising suppliers and identifying improvement opportunities within the organization. Successful organizations tend to automate their procure-to-pay cycle, which often increases buy-in from stakeholders as it facilitates the officially sanctioned process.

In Cessna's view, nothing beats interacting with customers and employees on the shop floor and in the office to get everyone on the same page. It is important to understand the environment for users of the procurement system and realize that people are just trying to get their jobs done. Cessna tries to assess how procurement and accounts payable can help employees, customers, and suppliers get their jobs done more effectively and more efficiently, whether it is through automation, better long-term agreement penetration, or just better customer service.

Acknowledgements

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ABOUT APQC

For over 30 years, APQC has been on the leading edge of improving performance and fostering innovation around the world. APQC works with organizations across all industries to find practical, cost-effective solutions to drive productivity and quality improvement. We are a member-based nonprofit currently serving more than 500 organizations in all sectors of business, education, and government.

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